

CLAIMS

1 1. Axial thrust bearing for supporting the rotating shaft of an exhaust gas
2 turbocharger connected to a lubricating oil circuit, which bearing has at least one essentially
3 flat sliding surface and at least one bearing surface (3) in the form of a profiled ring-shaped
4 surface, between which and the flat surface a lubricating gap is formed, where the bearing
5 surface has several longitudinal oil grooves (2) formed in it, which extend in the radial
6 direction and are open at the outside end; several wedge surfaces (1); and flat trap surfaces (5),
7 where one wedge surface (1) and one flat trap surface (5) are located between each pair of
8 adjacent lubricating oil grooves (2), characterized in that the wedge surfaces (1) have a
9 convergent orientation both in the circumferential direction and in the radial direction to form a
10 lubricating gap which narrows down in both directions.

1 2. Axial thrust bearing according to Claim 1, characterized in that the bearing
2 surface (3) is executed on a floating disk, which is mounted between a bearing comb on the
3 rotating shaft and a sliding surface on the stationary bearing housing.

1 3. Axial thrust bearing according to Claim 2, characterized in that the floating
2 disk has a profiled ring-shaped surface (3) according to Claim 1 on both sides, each of which
3 cooperates with a flat sliding surface.

1 4. Axial thrust bearing according to one of the preceding claims, characterized
2 in that each flat sliding surface is designed to be stationary, and each profiled ring-shaped
3 surface (3) is designed to rotate around or with the shaft.